

Name: \_\_\_\_\_

**Remediation – Exponent Rules – Raising an Exponent to an Exponent**

After you have watched the video from the wiki, you should try the following problems and then use the key to check your work. There is not a great way to check these problems with your calculator.

Directions: Please simplify the following.

1.  $(2x^3)^4$

2.  $(-3xy^2)^3$

3.  $(-ab)^4$

4.  $\left(\frac{x^5}{4}\right)^3$

5.  $\left(\frac{12ab^3}{7}\right)^2$

6.  $\left(\frac{-ab^2}{x^3}\right)^3$

7.  $\left(\frac{5x \cdot 6x^3}{3a}\right)^2$

8.  $\left(\frac{2a \cdot 6x^3}{3x}\right)^3$